

Title (en)

Torque measuring device for rotating body

Title (de)

Drehmomentmessvorrichtung für einen drehenden Körper

Title (fr)

Dispositif de mesure d'un couple de torsion pour un corps en rotation

Publication

**EP 1434043 B1 20060517 (EN)**

Application

**EP 03258181 A 20031223**

Priority

JP 2002377131 A 20021226

Abstract (en)

[origin: EP1434043A1] A torque measuring device for a rotating body comprises: a rotary section composed of first and second flanges to be joined respectively to driving and driven shafts, and a hollow cylinder having the first and second flanges formed respectively on both edges thereof; torque detectors provided at an inner circumference of the cylinder; light emitting elements provided at an outer circumference of the rotary section and adapted to emit light according to an output from the torque detectors thereby generating an optical signal; a light receiving fiber disposed outside the rotary section and adapted to receive the optical signal from the light emitting elements; and a rotary transformer composed of a primary coil constituted by an annulus with two-part separable structure disposed outside the rotary section and a secondary coil provided at the outer circumference of the rotary section, and adapted to supply electrical power to the rotary section. <IMAGE>

IPC 8 full level

**G01L 3/08** (2006.01); **G01L 3/10** (2006.01); **G01J 1/42** (2006.01); **G01L 3/12** (2006.01); **G01M 3/08** (2006.01); **G01M 3/12** (2006.01); **G08C 23/04** (2006.01)

CPC (source: EP US)

**G01M 3/08** (2013.01 - EP US); **G01M 3/12** (2013.01 - EP US)

Cited by

CN101979981A; EP1630535A3

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

**EP 1434043 A1 20040630**; **EP 1434043 B1 20060517**; DE 60305281 D1 20060622; DE 60305281 T2 20070222; JP 2004205428 A 20040722; JP 4099055 B2 20080611; US 2004123678 A1 20040701; US 7066035 B2 20060627

DOCDB simple family (application)

**EP 03258181 A 20031223**; DE 60305281 T 20031223; JP 2002377131 A 20021226; US 72777103 A 20031204